Attorney Docket Number: 1067 001 301 0202

REMARKS

Amendments

The Office Action of November 2, 2006 and Advisory Action mailed January 30, 2007 been carefully considered. Reconsideration of this application, as amended pursuant to the Request for Continued Examiner, is respectfully requested. Claims 1-13 and new claim 20 are pending.

Rejections

Turning now to the rejections set forth in the office action, claims 1-10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Shaw et al., U.S. Patent 6,033,146 ("Shaw") in view of Danielsson, U.S. Patent 4,281,496 ("Danielsson"). Claim 13 was rejected under 35 U.S.C. §103(a) as being unpatentable over Shaw in view of Danielsson, as applied to claims 1-10, and further in view of Chiuminatta et al., U.S. Patent 5,086,750 ("Chiuminatta"). Claims 1, 3-5, 6 and 13 were rejected under 35 U.S.C. §103(a) as being unpatentable over Phillips, U.S. Patent 5,441,677 ("Phillips"). Claim 11 was rejected under 35 U.S.C. §103(a) as being unpatentable over Phillips, as applied to claims 1, 3-5, 6 and 13, in view of Surface Preparation (understood to be Applicants-cited document #12 for "Surface Preparation; High Production Diamond Grinding, Polishing and Dust Extraction Systems" from www.concretemedic.com.) Claim 12 was rejected under 35 U.S.C. §103(a) as being unpatentable over Phillips in view of Surface Preparation, as applied to claim 11, and further in view of Jones, U.S. Patent 6,454,632 ("Jones").

In the Advisory Action, the Examiner failed to address several arguments in traversal of the rejections. Applicants respectfully request that the following arguments be considered in their entirety by the Examiner.

35 U.S.C. 103(a)

Claims 1-10 remain rejected under 35 U.S.C. §103(a) as being unpatentable over Shaw in view of Danielsson.

Shaw discloses a surface-seeded, exposed particulate concrete. Relative to surface seeding/exposure, Shaw teaches at col. 1, lines 22-48, that the exposure of aggregate leads to surface roughness when large aggregate is used and precludes use of the technique in flooring. This statement along suggests that Shaw's teaching of exposed particulate arises through the removal of concrete material, and not the particulate. In other words, such teaching indicates that the aggregate exposure taught by Shaw does not remove the aggregate material itself (no more than 5%; col. 4, lines 36-50), but exposes the surface of such aggregate. Such a teaching is contrary to the claimed invention and thus teaches away from the limitations set forth in the claims. While Shaw does suggest that sandblasting, acid etching or grinding and polishing may also be used to create texture variations (col. 4, lines 63-65), Applicants understand these treatments to be selective treatments to create texture variations, which would appear to further teach away from the present invention – a generally planar and smooth surface.

Amended claim 1 specifically recites, in order, preparing and forming the region to be poured, contiguously pouring concrete in the region, floating the concrete, allowing the concrete to cure to a semi-stiff state, finishing the exposed upper surface of the concrete to a generally planar surface, disbursing decorative aggregate over only the surface, and integrating the aggregate into the upper surface of the semi-stiff concrete. These steps are then followed by partially curing the concrete with the integrated aggregate, grinding the upper surface of the partially cured concrete having the integrated aggregate therein, including partially removing some of the partially cured concrete with the integrated aggregate material at least until the aggregate is exposed uniformly over the top of the concrete, fully curing the concrete with the integrated aggregate, and polishing the upper surface with the integrated aggregate to provide a generally planar and smooth surface on the monolithic concrete floor. Several of the recited steps, and limitations thereof, are not taught by Shaw. The Examiner acknowledged that Shaw does not teach the recited grinding step on the partially cured concrete. Moreover, the recited order of the steps is not disclosed by Shaw, and Shaw teaches away from the recited limitation of grinding the upper surface until aggregate is exposed uniformly. In particular, Shaw fails to teach partially curing the concrete, followed by grinding the upper surface of the partially cured concrete, including removing some integrated aggregate material at least until the aggregate is exposed uniformly over the top of the concrete, and then fully curing the concrete with the integrated aggregate before polishing the upper surface with the integrated aggregate to provide a generally planar and smooth surface.

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First, the Examiner's reliance upon Danielsson is incorrect, because Danielsson does not appear to teach grinding to achieve uniformly exposed aggregate as required by the present claims and as alleged at page 4 of the Final Office Action. Rather, Danielsson consistently teaches grinding to remove a thin surface layer to produce a surface with a sanded quality. Both Shaw and Danielsson fail to teach or suggest the recited limitation of "grinding the upper surface of the partially cured concrete with the integrated aggregate therein. Absent a teaching of all claim limitations, the rejection for obviousness is incomplete. Hence, Applicants respectfully suggest that the Examiner's comments in the Advisory Action are not relevant to the failure of the combination, and Applicants thereby traverse the rejection based upon a combination of Shaw in view of Danielsson.

Next, Applicants urge that Danielsson is not directed to providing an exposed surface flooring, but a subfloor upon which "tile, carpeting or the like" may be applied (see object of the invention at col. 5, lines 53-55). Applicants further submit that the teachings of the densification operation of Danielsson clearly establishes that the densification is employed to produce an upper layer of sand, concrete and water (col. 7, lines 38-40), such that a thin surface layer (col. 8, lines 7-9) can be removed to "produce a flat, porous surface having a sanded quality..." (col. 8, lines 8-10). Danielsson does not appear to teach the removal of aggregate in the grinding operation, and in fact specifically teaches densification so as to cause the upper layer to be substantially free of aggregate (even that within the concrete mixture). Applicants, once again, urge that such a teaching is contrary to the teachings of Shaw and to the limitations set forth in the rejected independent claim 1. As a result of the contrary teachings of Shaw and Danielsson, Applicants respectfully maintain that prima facie obviousness has not been established, and the rejection of claims 1-10 is respectfully traversed.

With respect to dependent claims 2-10, for the sake of brevity further distinctions are not set forth, but Applicants reserve the right to present arguments in support of such claims at a later time.

With respect to the separate rejection of dependent claim 13, Applicants urge that claim 13 is in condition for allowance for the reasons set forth above relative to claim 1 and for the sake of brevity further arguments in traversal of the rejection are not presented at

this time, but Applicants reserve the right to present arguments in support of claim 13 at a later time.

Claims 1, 3-5, 6 and 13 were rejected under 35 U.S.C. §103(a) as being unpatentable over Phillips. As noted by the Examiner, Phillips does teach "[a] method of fabricating a concrete floor having an autogenous hard high gloss finish that does not require further coatings" as set forth in the Abstract. As further set forth in the Abstract, the two-layer floor includes a top layer, where the floor surface layer is created by applying an amount of a dry shake dressing material containing quartz crystals and a coloring agent, but no decorative aggregate, to the upper surface of the slab and floating the surface until the finishing layer reaches a predetermined thickness, and then curing to form a generally monolithic structure with the slab but having a higher compressive strength when fully cured."

Notably, the rejection is based upon §103, and Applicants understand this to be an indication that Phillips does not anticipate the rejected claims, but that the recited limitations of the rejected claims would have been obvious to one of ordinary skill in the art. It is, however, unclear from the rejection, just what the Examiner relies upon as being taught by Phillips that would render the claimed invention obvious, unless it is the Examiner's statement at p. 7, that "changing the sequence in which process steps are completed has been held to be *prima facie* obvious absent unexpected or new results." (italics in original) To this Applicants respectfully submit that, as described below, and further that the claimed invention is able to achieve an ornamental surface by, in part, applying decorative aggregate to a semi-stiff concrete surface - a new result that is not taught or suggested by Phillips.

Phillips clearly describes the required deposit of a dry cementatious material (see Phillips' shake mixture description; col. 3, lines 60-63) that is added in multiple increments over the surface of a poured concrete base (col. 6, lines 34-51). Applicants further note that a substantial layer produced from the dry shake is clearly indicated by the intentional pouring of the initial concrete to a level approximately 0.5 inches below the desired grade (col. 3, lines 54-56 and col. 6, lines 18-22), thus indicating that the shake layer is added on top of the floated concrete layer. As application of a cementatious material would appear to indicate. Phillips teaches the addition of a top

layer over the poured concrete – teaching away from the recited monolithic concrete floor. Notably, claim 1 is directed to forming an integrated ornamental surface on a monolithic concrete floor and recites integrating decorative aggregate into, not on top of, the upper surface of semi-stiff concrete.

The rejection states that Phillips teaches a method of making a high gloss concrete floor, but does not allege that Phillips teaches "[a] method for forming an integrated ornamental surface on a monolithic concrete floor" as set forth in amended claim 1. Moreover, while Phillips does teach preparing a base, pouring concrete and floating the rough concrete, the claimed process and that which is disclosed by Phillips are urged to diverge and Phillips teaches away from the claim when it describes the addition of the higher-strength shake layer. More specifically, after floating "applications are made of a dry shake product" that consists of Portland cement, silicon and crystalline quartz, and "the entire surface is, again, finished by floating to the desired texture. This process is repeated until the surface is firm enough to support a finishing blade." (col. 3, lines 57-66). Conversely, the claimed invention recites, after the floating step, allowing the concrete to cure to a semi-stiff state, finishing the exposed upper surface of the monolithic layer, then disbursing decorative aggregate over the surface of the monolithic layer and integrating the aggregate into the upper surface of the semi-stiff concrete.

To the best of Applicants' understanding the Examiner next urges that the iterative addition of dry shake material (the last sentence of page 6 being circuitous in its logic), even though acknowledged as "additional process steps not recited in the instant claim" are then urged as being "completed in order at different stages of the repetitious process." Applicants respectfully submit that the teaching of steps not recited in the rejected claims, whether repeated or not, cannot give rise to claimed limitations. If the process steps of Phillips are not recited in the claims, then how can they give rise to the recited claim limitations? Applicants note that the Examiner failed to address this point or provide clarification in the Advisory Action. Hence, Applicants' position remains that Phillips fails to teach, or suggest, disbursing non-cementatious decorative aggregate over the surface of the semi-stiff concrete and integrating the aggregate into the upper surface of the semi-stiff concrete as set forth in claim 1.

The Examiner also appears to erroneously characterize Phillips as teaching partially curing the floor and then grinding to establish the desired surface smoothness. (Office

Action, p. 7, top) On the contrary, Phillips specifically teaches that after being sealed, "[t]he floor at this stage of preparation is allowed to cure for approximately 30 days or until the concrete reaches its substantially full compressive strength..." (see col. 4, lines 16-19; col. 7, lines 6-10). Applicants understand Phillips to teach away from the recited limitation of "partially curing the concrete with the integrated aggregate" before grinding as recited in claim 1.

Moreover, Phillips teaches the use of a floor <u>buffing</u> machine, to remove a sealer and to perform initial buffing of the surface. (col. 7, lines 40-56). Applicants note that Phillips such disclosure does not teach or suggest grinding, let alone "including partially removing some integrated aggregate material at least <u>until the aggregate is exposed uniformly over the top of the concrete</u>" (emphasis added) as recited in claim 1. In the event this rejection is maintained, Applicants request that the Examiner set forth where such limitations are taught or suggested by Phillips. In view of the various distinction noted herein, Applicants respectfully submit that Phillips does not teach or suggest recited aspects of the method set forth in claim 1. For this reason *prima facie* obviousness has not been established and Applicants respectfully traverse the rejection as applied to claim 1.

Relative to dependent claims 3-5, 6 and 13, these claims all depended from presumably allowable claim 1 and are believed to be patentable for the reasons and distinctions set forth above relative to claim 1. For the sake of brevity, the patentable distinctions of the dependent claims are not discussed in detail. Applicants note, however, that no teaching is identified for the group of claim 3 or of man-made decorative aggregate as set forth in claim 5. Nor were

Relative to the rejection of claim 6, the rejection remains incomplete. The Examiner appears to have employed language that is largely verbatim of that set forth in the rejection of claim 6 over Shaw in view of Danielsson – however, <u>Phillips does not teach what the Examiner has alleged at col. 4, lines 14-16</u>. In the event that this rejection is maintained, Applicants respectfully request that those portions of Phillips relied upon for teaching the limitations of claim 6 be identified so that Applicants can respond to the rejection. Absent such, the rejection remains incomplete and Applicants remain unable to further respond. Withdrawal of the rejection of claim 6 is respectfully requested.

Claim 11 was rejected under 35 U.S.C. §103(a) as being unpatentable over Phillips, as applied to claims 1, 3-5, 6 and 13, in view of Surface Preparation (understood to be Applicants-cited document #12 for "Surface Preparation; High Production Diamond Grinding, Polishing and Dust Extraction Systems" from www.concretemedic.com.) For the sake of brevity Applicants again refer to the arguments in traversal of the rejection of claim 1, incorporated herein as though fully set forth. In the rejection, the Examiner acknowledges that Phillips fails to disclose the use of diamond disks. Nor does Phillips disclose the recited step of grinding the upper surface of the partially cured concrete with the integrated aggregate therein, including partially removing some integrated aggregate material at least until the aggregate is exposed uniformly over the top of the concrete" as set forth in claim 1. As Phillips teaches the buffing of the surface to remove a sealer, Applicants are uncertain just what basis the Examiner urges for the proposed combination. Why would one of skill in the art be motivated to grind away the shake layer of Phillips? Where does Phillips or any other reference suggest that such a process is necessary or desireable relative to the Phillips process. Unless, perhaps, the Examiner is employing hindsight reconstruction - based upon Applicants' claims - to select the disclosures and reconstruct the claims, alleging them to be obvious. Neither Phillips nor the Surface Preparation document specifically teach or suggest the threepass process recited in claim 11. Nor has the Examiner alleged that either does so. Hence the rejection fails to establish prima facie obviousness through a teaching or suggestion of each of the elements recited in claim 11. The rejection is respectfully traversed.

Claim 12 was rejected under 35 U.S.C. §103(a) as being unpatentable over Phillips in view of Surface Preparation, as applied to claim 11, and further in view of Jones. For the sake of brevity Applicants again refer to the arguments in traversal of the rejection of claims 1 and 11, incorporated as though fully set forth herein. Once again, Applicants note that the Examiner failed to indicate just how one of ordinary skill in the art would have been motivated to employ the methods of Jones when the teachings of Phillips appear to be to the contrary. Phillips teaches the removal of a water soluble sealing material (e.g., col. 4, lines 40-44; col. 7, lines 40-44), and teaches away from waxing or other coatings in favor of the shake surface and its natural surface grit (col. 8, lines 9-13), whereas Jones appears to suggest that the material be permitted to remain on the surface. Applicants respectfully urge that Phillips and Jones teach away from one another and are not properly combined.

Applicants further submit that the basis for the combination proposed in the rejection – for purposes of hardening/densifying as taught by Jones, is also contrary to the teachings of Phillips, which make clear that "[t]he surface of the floor produced in accordance with the present invention is also extremely hard and difficult to damage." (col. 8, lines 3-6) – that is the purpose of applying the shake layer. It would, once again, seem that hindsight reconstruction of claim 12 was the motivation for the combination rather than the teachings of the patents themselves. In the event the rejection is maintained, Applicants respectfully request that the Examiner identify where the Examiner finds a suggestion that the surface of Phillips floor requires or would benefit from the materials described by Jones, no such teaching having been set forth in the Advisory Action in response to similar arguments. Otherwise, Applicants respectfully submit that prima facie obviousness has not been established by the arguable combination, and that the rejection of claim 12 is respectfully traversed.

Conclusion

In view of the foregoing remarks and amendments, the amendment above is submitted for entry with the Request for Continued Examination, and further reconsideration of this application and allowance thereof is respectfully requested.

In the event that additional fees are required as a result of this response, including fees for extensions of time, such fees should be charged to USPTO Deposit Account No. 50-2737 for Basch & Nickerson LLP.

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In the event the Examiner considers personal contact advantageous to the timely disposition of this case, the Examiner is hereby authorized to call Applicants' attorney, Duane C. Basch, at Telephone Number (585) 899-3970, Penfield, New York.

Respectfully submitted,

/Duane C. Basch, Esq. Reg. No. 34,545/ Duane C. Basch, Attorney for Applicants

Registration No. 34,545 Basch & Nickerson LLP 1777 Penfield Road Penfield, New York 14526

(585) 899-3970

DCB/dcb